

IN THE CLAIMS:

- 1 1. (Previously Presented) A method of transferring ownership of a volume comprising a
2 plurality of disks from a source server to a destination server comprising the steps of:
3 changing ownership information stored in each of the plurality of disks to an un-
4 owned state from a state of source server ownership; and
5 changing ownership information stored in each of the plurality of disks to a state of
6 destination server ownership from the un-owned state.
- 1 2. (Previously Presented) The method of claim 1 wherein the step of changing ownership
2 information stored in each of the plurality of disks to an un-owned state further comprises
3 the steps of:
4 changing a first ownership attribute of the disks to an un-owned state, where the
5 first ownership attribute is a predetermined ownership sector on each disk; and
6 changing a second ownership attribute of the disks to an un-owned state, where
7 the second ownership attribute is a small computer systems interface (SCSI) reservation.
- 1 3. (Previously Presented) The method of claim 1 wherein the step of changing ownership
2 information stored in each of the disks to a destination server ownership further com-
3 prises the steps of:
4 changing a first ownership attribute of the disks to a destination server state,
5 where the first ownership attribute is a predetermined ownership sector on each disk; and
6 changing a second ownership attribute of the disks to a destination server state,
7 where the second ownership attribute is a small computer systems interface (SCSI) reser-
8 vation.

1 4. (Currently Amended) A method for transferring ownership of a volume having a plu-
2 rality of disks, the method comprising the steps of:

3 sending a first message to a source server, the message containing a request for
4 transferring ownership of a volume of disks;
5 receiving a response from the source server;
6 if the response contains abort information, aborting the transfer;
7 if not, verifying that the volume can be transferred;
8 if the volume can be transferred, sending a second message to the source server to
9 perform the first part of a transfer process to transfer ownership from the source server to
10 an un-owned state by changing ownership information on each disk of the plurality of
11 disks;
12 receiving a response from the source server after it performed the first part of the
13 transfer process; and
14 in response to the step of receiving, performing a second part of the transfer proc-
15 ess to transfer ownership from the un-owned state to a destination server by changing
16 ownership information on each disk of the plurality of disks.

1 5. (Previously Presented) The method of claim 4 wherein the second part of the transfer
2 process further comprises the steps of:

3 changing a first ownership attribute of the disks to a destination server state,
4 where the first ownership attribute is a predetermined ownership sector on each disk; and
5 changing a second ownership attribute of the disks to a destination server state,
6 where the second ownership attribute is a small computer systems interface (SCSI) reser-
7 vation.

1 6. (Currently Amended) A method for transferring ownership of a volume having a plu-
2 rality of disks comprising the steps of:

3 verifying that the disks can be transferred in response to an initial request from a
4 destination server;
5 sending an acknowledgement by the source server to the destination server;
6 receiving a second-request from the destination server;
7 aborting if the second-request contains abort information;
8 changing the volume to an off-line status in response to the second-request not
9 containing abort information;
10 performing a first part of a transfer process, the first part of the transfer process
11 being transferring ownership from the source server to an un-owned state by changing
12 ownership information on each disk of the plurality of disks; and
13 sending a message to the destination server to prompt a second part of the transfer
14 process, the second part of the transfer process being transferring ownership from the un-
15 owned state to the destination server by changing ownership information on each disk of
16 the plurality of disks.

1 7. (Previously Presented) The method of claim 6 wherein the first part of the transfer
2 process further comprises the steps of:

3 changing a first ownership attribute of the disks to an un-owned state, where the
4 first ownership attribute is a predetermined ownership sector on each disk; and
5 changing a second ownership attribute of the disks to an un-owned state, where
6 the second ownership attribute is a small computer systems interface (SCSI) reservation.

1 8. (Currently Amended) A method of transferring ownership of a volume having a plural-
2 ity of disks comprising the steps of:

3 writing a first destination log;
4 verifying that the plurality of disks can be transferred;
5 writing a first source log;
6 verifying that the volume can be accepted by the destination;

7 writing a second destination log;
8 writing a second source log;
9 performing a first part of a transfer process by changing ownership information on
10 each disk to an un-owned state from a source server owned state;
11 writing a third source log ;
12 writing a third destination log ;
13 performing a second part of the transfer process by changing the ownership in-
14 formation on each disk from to a destination ~~server~~server owned state from the un-owned
15 state; and
16 erasing the previously written logs.

1 9. (Previously Presented) A method of transferring ownership of a volume having a plu-
2 rality of disks comprising the steps of:
3 writing a first log to record a first part of a transfer process;
4 performing the first part of the transfer process, the first part of the transfer proc-
5 ess being changing ownership information stored on each disk of the volume from a
6 source server to an un-owned state;
7 writing a second log to record a second part of the transfer process; and
8 performing the second part of the transfer process, the second part of the transfer
9 process being changing ownership information stored on each from the un-owned state to
10 a destination server.

1 10. (Previously Presented) A computer-readable medium for modifying ownership of
2 disks relative to a source file server and a destination file server, the computer-readable
3 medium including instructions for performing the steps of:
4 in the source server, moving the disks from a source-owned state to an un-owned
5 state; and

6 in the destination server, moving the disks from the un-owned state to a destina-
7 tion-owned state.

1 11. (Previously Presented) The computer-readable medium of claim 10 wherein the step
2 of moving the disks to an un-owned state further comprises the steps of:
3 changing first ownership attribute of the disks to an un-owned state, where the
4 first ownership attribute is a predetermined ownership sector on each disk; and
5 changing a second ownership attribute of the disks to an un-owned state, where
6 the second ownership attribute is a small computer systems interface (SCSI) reservation.

1 12. (Previously Presented) The computer-readable medium of claim 10 wherein the step
2 of moving the disks from an un-owned state to a destination-owned state further com-
3 prises the steps of:
4 changing first ownership attribute of the disks to a destination-owned state,
5 where the first ownership attribute is a predetermined ownership sector on each disk; and
6 changing a second ownership attribute of the disks to a destination-owned state,
7 where the second ownership attribute is a small computer systems interface (SCSI) reser-
8 vation.

1 13. (Previously Presented) A system for transferring ownership of a volume having a disk
2 from a source server to a destination server, the system comprising:
3 means for changing ownership information stored in each of the disk from a state
4 of source server ownership to an un-owned state; and
5 means for changing ownership information stored in each the disk from an un-
6 owned state to a destination server-owned state.

1 14. (Previously Presented) The system of claim 13 wherein the means for changing own-
2 ership information from a state of source server ownership to an un-owned state further
3 comprises:

4 means for changing ownership information stored in a predetermined sector of the
5 disk to an un-owned state; and

6 means for changing a small computer system interface reservation of the disk to
7 an un-owned state.

1 15. (Previously Presented) The system of claim 13 wherein the means for changing own-
2 ership information from an un-owned state to a destination server-owned state further
3 comprises:

4 means for changing ownership information stored in a predetermined sector of the
5 disk to a destination server-owned state; and

6 means for changing a small computer system interface reservation of the disk to a
7 destination server-owned state.

1 16. (Previously Presented) A method of transferring ownership of a volume having a plu-
2 rality of disks from a source server to a destination server, the method comprising the
3 steps of:

4 changing a first attribute of ownership from source server ownership to an un-
5 owned state by writing the change to a log data structure and rewriting the first attribute
6 of ownership on the disk, where the first attribute is a predetermined ownership sector on
7 each disk;

8 changing a second attribute of ownership from source ownership to an un-owned
9 state by writing the change to a second log data structure and rewriting the second attrib-
10 ute of ownership on the disk, where the second attribute is small computer systems inter-
11 face (SCSI) reservation;

12 changing the first attribute of ownership from the un-owned state of ownership to
13 destination server ownership by writing the change to a third log data structure and re-
14 writing the first attribute of ownership on the disk; and
15 changing the second attribute of ownership from the un-owned state to destination
16 server ownership by writing the change to a fourth log data structure and rewriting the
17 second attribute of ownership on the disk.

1 17. (Previously Presented) The method of claim 16, further comprising:
2 in the event of a failure during the process of transferring ownership, utilizing the
3 log data structures to continue the process of changing ownership.

1 18. (Previously Presented) A system to transfer ownership of a volume having a plurality
2 of disks from a source server to a destination server, comprising:

3 means for changing a first attribute of ownership from source server ownership to
4 an un-owned state by writing the change to a log data structure and rewriting the first at-
5 tribute of ownership on the disk, where the first attribute is a predetermined ownership
6 sector on each disk;

7 means for changing a second attribute of ownership from source ownership to an
8 un-owned state by writing the change to a second log data structure and rewriting the
9 second attribute of ownership on the disk, where the second attribute is a small computer
10 systems interface (SCSI) reservation;

11 means for changing the first attribute of ownership from the un-owned state of
12 ownership to destination server ownership by writing the change to a third log data struc-
13 ture and rewriting the first attribute of ownership on the disk; and

14 means for changing the second attribute of ownership from the un-owned state to
15 destination server ownership by writing the change to a fourth log data structure and re-
16 writing the second attribute of ownership on the disk.

- 1 19. (Previously Presented) The system of claim 18, further comprising:
2 in the event of a failure during the process of transferring ownership, means for
3 utilizing the log data structures to continue the process of changing ownership.
- 1 20. (Previously Presented) A system to transfer ownership of a volume having a plurality
2 of disks from a source server to a destination server, comprising:
3 a first computer to change a first attribute of ownership from source server owner-
4 ship to an un-owned state by writing the change to a log data structure and rewriting the
5 first attribute of ownership on the disk, where the first attribute is a predetermined owner-
6 ship sector on each disk;
7 a second computer to change a second attribute of ownership from source owner-
8 ship to an un-owned state by writing the change to a second log data structure and rewrit-
9 ing the second attribute of ownership on the disk, where the second attribute is a small
10 computer systems interface (SCSI) reservation;
11 a third computer to change the first attribute of ownership from the un-owned
12 state of ownership to destination server ownership by writing the change to a third log
13 data structure and rewriting the first attribute of ownership on the disk; and
14 a fourth computer to change the second attribute of ownership from the un-owned
15 state to destination server ownership by writing the change to a fourth log data structure
16 and rewriting the second attribute of ownership on the disk.
- 1 21. (Previously Presented) The system of claim 20, further comprising:
2 in the event of a failure during the process of transferring ownership, a computer
3 to utilize the log data structures to continue the process of changing ownership.
- 1 22. (Previously Presented) The system of claim 20, further comprising:

2 the first computer, the second computer, the third computer, and the fourth com-
3 puter are a single computer.

1 23. (Previously Presented) The system of claim 22, further comprising:
2 the single computer is the destination server.

1 24. (Previously Presented) The system of claim 20, further comprising:
2 the first computer and the second computer are the source server.

1 25. (Previously Presented) The system of claim 20, further comprising:
2 the third computer and the fourth computer are the destination server.

1 26. - 27. (Cancelled)

1 28. (Previously Presented) The method of claim 1, wherein the ownership information
2 includes a small computer systems interface (SCSI) reservation.

1 29. (Previously Presented) The method of claim 1, wherein the ownership information
2 includes a predetermined ownership sector on each disk.

1 30. (Previously Presented) The method of claim 1, wherein the ownership information
2 includes a predetermined ownership sector on each disk and a small computer systems
3 interface (SCSI) reservation.

1 31. (Previously Presented) A method of transferring ownership of a volume comprising a
2 plurality of disks from a source server to a destination server comprising the steps of:
3 verifying that the disks can be transferred in response to an initial request from a
4 destination server; and
5 changing ownership information stored in each of the plurality of disks between
6 three states including: a source server ownership state, an un-owned state, and a destina-
7 tion server ownership state.

1 32. (Previously Presented) The method of claim 31, wherein the ownership information
2 includes a small computer systems interface (SCSI) reservation.

1 33. (Previously Presented) The method of claim 31, wherein the ownership information
2 includes a predetermined ownership sector on each disk.

1 34. (Previously Presented) The method of claim 31, wherein the ownership information
2 includes a predetermined ownership sector on each disk and a small computer systems
3 interface (SCSI) reservation.